

Claim 1 (currently amended): A lithography system comprising:

a plurality of lens elements;

the plurality of lens elements having a first lens element adapted to face a source of radiation, and having a final lens element comprising a removable slab of a material with an index of refraction greater than 1, and having a surface adapted to be pressed against a ~~the~~ sample in order to form a depression at the surface of the sample facing the final lens element; and

a stage to support said sample in contact with the surface of the final lens element.

Claim 2 (currently amended): The lithography system of claim 1, wherein the material of said final lens element comprises one of silicon dioxide, calcium fluoride, aluminum oxide, yttrium fluoride, lanthanum fluoride, and strontium fluoride.

Claim 3 (currently amended): The lithography system of claim 1, wherein said plurality of lens elements projects radiation having a wavelength of about 193 nm ~~193nm~~ to the sample.

Claim 4 (currently amended): The lithography system of claim 1, wherein said plurality of lens elements projects radiation having a wavelength of about 157 nm ~~157nm~~ to the

sample.

Claim 5 (original): The lithography system of claim 1, including a mask between the source of radiation and said plurality of lens elements, and said plurality of lens elements demagnifies an object on the mask by a factor greater than 4 at an image plane on or near said sample.

Claim 6 (currently amended): The lithography system of claim 1, including a mask between the source of radiation and said plurality of lens elements, and said plurality of lens elements projects an image of an object on the mask at an image plane on or near the surface of the final lens element.

Claim 7 (original): The lithography system of claim 1, wherein said sample has a layer adapted to be developed in response to radiation projected by the plurality of lens elements.

Claim 8 (original): The lithography system of claim 7, wherein said sample has a soft layer coated on top of said layer adapted to be developed in response to radiation projected by the plurality of lens elements.

Claim 9 (original): The lithography system of claim 1, wherein a material adapted to be developed in response to radiation projected by the plurality of lens elements is dispensed on top of the sample before the final lens element is pressed against the sample.

Claim 10 (canceled).

Claim 11 (currently amended): A lithography system comprising:

a projection lens for imaging an object on a mask onto a sample, one side of the projection lens adapted to be pressed against the sample in order to form a depression at the surface of the sample facing the projection lens and an other side of the projection lens adapted to be placed in contact or close proximity with the mask; and

a stage to support said sample in contact with the projection lens;

wherein the other side of the projection lens placed in contact or close proximity with the mask comprises a removable slab of material.

Claim 12 (canceled).

Claim 13 (currently amended): The lithography system of claim 11, wherein a material of a lens element of said projection lens adapted to be placed in contact or close proximity with the mask, comprises a material including one of silicon dioxide, calcium fluoride, aluminum oxide, yttrium fluoride, lanthanum fluoride, and strontium fluoride.

Claim 14 (currently amended): The lithography system of claim 11, wherein said projection lens projects radiation having a wavelength of about 193 nm ~~193nm~~ from the mask to the sample.

Claim 15 (currently amended): The lithography system of claim 11, wherein said projection lens projects radiation having a wavelength of about 157 nm ~~157nm~~ from the mask to the sample.

Claim 16 (original): The lithography system of claim 11, wherein said projection lens demagnifies an image on the mask by a factor greater than 4 at an image plane on or near said sample.

Claim 17 (original): The lithography system of claim 11, wherein said projection lens, includes a lens element having a surface adapted to be pressed against the sample in order to form a depression at the surface of the sample facing the lens element, and the projection lens projects an image of a mask at an image plane on or near the surface of said lens element.

Claim 18 (currently amended): A ~~The~~ lithography system ~~of~~ ~~claim 11,~~ comprising:

a projection lens for imaging an object on a mask onto a sample, one side of the projection lens adapted to be pressed against the sample in order to form a depression at the surface of the sample facing the projection lens and an other side of the projection lens adapted to be placed in contact or close proximity with the mask; and

a stage to support said sample in contact with the projection lens;

wherein said projection lens, includes a lens element having a surface adapted to be pressed against the sample in order to

form a depression at the surface of the sample facing the lens, said lens element comprising ~~comprises~~ a removable slab.

Claims 19-30 (canceled).

Claim 31 (new): The lithography system of claim 18, wherein a material of a lens element of said projection lens adapted to be placed in contact or close proximity with the mask, comprises a material including one of silicon dioxide, calcium fluoride, aluminum oxide, yttrium fluoride, lanthanum fluoride, and strontium fluoride.

Claim 32 (new): The lithography system of claim 18, wherein said projection lens projects radiation having a wavelength of about 193 nm from the mask to the sample.

Claim 33 (new): The lithography system of claim 18, wherein said projection lens projects radiation having a wavelength of about 157 nm from the mask to the sample.

Claim 34 (new): The lithography system of claim 18, wherein said projection lens demagnifies an image on the mask by a factor greater than 4 at an image plane on or near said sample.

Claim 35 (new): The lithography system of claim 18, wherein said projection lens, includes a lens element having a surface adapted to be pressed against the sample in order to form a depression at the surface of the sample facing the lens element, and the projection lens projects an image of a mask at an image plane on or near the surface of said lens element.